

SUMMARY

The Spent Nuclear Fuel (SNF) mission consists of the Spent Nuclear Fuel Project WBS 1.3.1.1 (Project Baseline Summary [PBS] WM01) and the follow-on, autonomous Canister Storage Building (CSB) Operations Project WBS 1.3.2.1 (PBS WM02). The existing SNF Project contractor organization is the caretaker of PBS WM02, though the work scope is not part of the SNF Project. There is no funding for PBS WM02 in FY 1998.

Baseline schedules to date were aggressive, completed activities in parallel, and had a low probability of success. A realistic schedule and budget was developed accounting for technical, construction, engineering and startup uncertainties remaining through project completion. The schedule is to be provided to RL on April 15, and will support establishment of Tri-Party Agreement and DNFSB milestones for the project.

Construction of the CSB is 85 percent complete, compared to 88 percent planned. Schedule delays have resulted from the new Multi-Canister Overpack (MCO) sealing strategy.

Construction of the Cold Vacuum Drying (CVD) Facility is 55 percent complete compared to 63 percent planned.

The remaining three MCO transport casks were approved for shipment. Fabrication of MCO baskets was reinitiated. The work had previously been stopped due to deficiencies in the fabricator's quality assurance practices.

DOE-HQ is conducting an investigation of the SNF Project's QA compliance and/or implementation. On-site interviews and tours are currently being performed.

Milestone performance (EA, DOE-HQ, Field Office, and RL) shows that two milestones were completed on schedule and one milestone is overdue. There are eight milestones forecast late.

ACCOMPLISHMENTS

- Submittal of a proposed high confidence level schedule and budget profile.
- CSB construction is 85 percent complete.
- CVD facility is 55 percent complete.
- The final three MCO transport casks were approved for shipment (three months early).
- Completed MCO redesign for 450 psi design basis.

COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
Spent Nuclear Fuels	\$76.7	\$74.8	\$1.9

The \$1.9 million (2 percent) favorable cost variance is under the reporting threshold.

SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Spent Nuclear Fuels	\$76.7	\$92.1	(\$15.4)

The \$15.4 million (17 percent) unfavorable schedule variance is mainly due to the MCO Sealing Strategy. Other contributors include delays to construction due to NOC permits and CVD Design changes.

ISSUES

- 1) **Working to low-confidence schedule.** There is cost growth with no contingency and design changes continue to impact schedule.

Strategy/Status: A realistic schedule and budget were developed and will be discussed with the regulators. Alternate funding sources are being pursued, and a manager assigned to manage technical issue closure.

- 2) **Closure of major technical issues.** Closure of major technical issues has a potential impact on designs/safety analysis.

Strategy/Status: Actions and target resolution dates were identified. The decision not to remove aluminum hydroxide beyond routine cleaning appears feasible. Thermal-gravimetric analysis (TGA) tests are scheduled to resolve oxidation rate issue and eliminate the need for the remaining whole element tests. A manager was assigned to project manage issue closure.

COST VARIANCE ANALYSIS: (\$ 1.9M)**WBS/PBS****Title****1.3.1.1/WM01****Spent Nuclear Fuel**

The two percent favorable variance is under the reporting threshold.

SCHEDULE VARIANCE ANALYSIS: (\$15.4M)**WBS/PBS****Title****1.3.1.1/WM01****Spent Nuclear Fuel**

Description and Cause: The 17 percent unfavorable schedule variance is mainly due to the MCO Sealing Strategy. Other contributors include delays to construction due to NOC permits and CVD Design changes.

Impact: K Basin sub-projects and CVD are behind schedule to the current baseline. Project impact is being evaluated.

Corrective Action: A baseline change request to address the MCO sealing strategy is in the RL review process and K Basin and CVD construction holds have been released. The SNF project schedule is undergoing an evaluation at this time.

MILESTONE EXCEPTION REPORT

<u>No../WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
OVERDUE - 1				
S02-01-210 1.3.1.1	RL	Issue DOE Approved K Basin Transition Criteria - EPA	12/30/97	Proposed Deletion
Cause: Milestone is proposed to be deleted with transfer of PBS TP09 to WM01. Impact: None. Corrective Action: Baseline Change Request (BCR) SNF-98-015 to transfer the transition work scope to the SNF project per the DOE Memorandum was approved on April 13, 1998. All technical, cost or schedule baseline documents and system changes necessary will be fully implemented in the next reporting period to reflect this BCR.				
FORECAST LATE - 8				
S04-97-355 1.3.1.1	RL	Complete KW FRS Construction	7/16/98	9/17/98
Cause: Due to concerns regarding technical content and format of Safety Analysis Documents (SAD) it is necessary to revise the content and format of the SAD for FRS, Integrated Water Treatment System (IWTS), and Cask Loadout System (CLS) to comply with RL requirements. Impact: The time required to prepare the criteria documents and rework/reformat of the existing SAD, which were completed for FRS and IWTS, will delay the Critical Decision 3B authorization, which are required before installation work can proceed in the KW Basin. Corrective Action: SAD preparation proceeded on an alternative approach consisting of submitting limited safety analysis documents.				
S05-98-010 1.3.1.1	FO	Complete FAB and Delivery First Shipment of MCOs	5/21/98	7/31/98
Cause: Due to implementation of the new MCO Sealing Strategy, an engineering change notice (ECN) has been initiated to redesign the MCO to accommodate a higher pressure rating. Impact: Five month delay in the completion of Oregon Iron Works (OIW) fabrication activities for first five MCOs. Corrective Action: Baseline Change Request (BCR) SNF-98-006 Simplified SNF Project Baseline (MCO Sealing Strategy) was approved on April 13, 1998. Awaiting Contracting Officer's direction to proceed with implementing all technical, cost or schedule baseline documents and system changes necessary to reflect this BCR.				

MILESTONE EXCEPTION REPORT

<u>No../WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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S08-98-040 1.3.1.1	FO	CVD design validation complete	6/15/98	7/27/98
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Cause: This milestone is tied to the Grant Contract, which was on hold due to safety significant decision and redesign of the HVAC design.

Impact: This delay caused a negative 13-day float to the fuel removal milestone.

Corrective Action: Baseline Change Request (BCR) SNF-98-006 Simplified SNF Project Baseline (MCO Sealing Strategy) was approved on April 13, 1998. Awaiting Contracting Officer's direction to proceed with implementing all technical, cost or schedule baseline documents and system changes necessary to reflect this BCR.

S03-98-611 1.3.1.1	RL	SAR K Basin submittal	8/4/98	10/15/98
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Cause: The delay is caused by extensive comments on the process system.

Impact: Design activities were delayed approximately two months while the architect/engineer performed a compliance check on existing designs.

Corrective Action: Redesign efforts are being undertaken and delivery dates will be revised.

S05-98-004 1.3.1.1	RL	MCO available to operations	6/4/98	8/13/98
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Cause: Due to implementation of the new MCO Sealing Strategy, an engineering change notice (ECN) has been initiated to redesign the MCO to accommodate a higher pressure rating.

Impact: Five month delay in the completion of Oregon Iron Works (OIW) fabrication activities for first five MCOs.

Corrective Action: Baseline Change Request (BCR) SNF-98-006 Simplified SNF Project Baseline (MCO Sealing Strategy) was approved on April 13, 1998. Awaiting Contracting Officer's direction to proceed with implementing all technical, cost or schedule baseline documents and system changes necessary to reflect this BCR.

S07-97-054 1.3.1.1	RL	SAR CSB final submittal	5/29/98	8/28/98
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Cause: The project technical baseline was changed from a pressure management basis to a sealed MCO basis with the approval of the urgent BCR.

Impact: The technical inputs to the SAR were delayed, thus moving out the completion of the preparation.

Corrective Action: Baseline Change Request (BCR) SNF-98-006 Simplified SNF Project Baseline (MCO Sealing Strategy) was approved on April 13, 1998. Awaiting Contracting Officer's direction to proceed with implementing all technical, cost or schedule baseline documents and system changes necessary to reflect this BCR.

MILESTONE EXCEPTION REPORT

<u>No../WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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S07-97-053 1.3.1.1	RL	Receive approval of CSB SAR by RL	9/1/98	12/02/98
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Cause: The project technical baseline was changed from a pressure management basis to a sealed MCO basis with the approval of the emergency BCR.

Impact: The technical inputs to the SAR were delayed, thus moving out the completion of the preparation.

Corrective Action: Baseline Change Request (BCR) SNF-98-006 Simplified SNF Project Baseline (MCO Sealing Strategy) was approved on April 13, 1998. Awaiting Contracting Officer's direction to proceed with implementing all technical, cost or schedule baseline documents and system changes necessary to reflect this BCR.

S07-97-620 1.3.1.1	RL	Complete KW IWTS Construction Installation	9/3/98	9/30/98
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Cause: Delayed due to inadequate safety basis.

Impact: Construction delayed, however float is available.

Corrective Action: Work around plan being developed to recover the schedule slip. Available funding may impact implementation of this corrective action.